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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,914	08/04/2003	John Stafford	4240-P2A2D	7563
29370	7590	11/04/2004	EXAMINER	
ROBERT A. PARSONS 340 E. PALM LN SUITE 260 PHOENIX, AZ 85004			NGUYEN, TUYEN T	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,914

Applicant(s)

STAFFORD ET AL.

Examiner

TUYEN T NGUYEN

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/4/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 1-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected specie/invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/15/2004.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 17-19 and 21-22, rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al. [US 6,384,353].

Huang et al. discloses a sealed package including a MEMS device [figure 5] comprising:

- a supporting silicon substrate [110] with a surface;
- at least one contact for the MEMS device on the surface substrate with an external connection to the contact and a cantilever on the surface of the supporting substrate, the cantilever being positioned to come into electrical engagement with the contact in one orientation;

- a metal seal ring [113] fixed on the surface of the circumferentially around the contact supporting substrate and the cantilever;

- a cap member [150] with a cavity and a continuous edge circumferentially around the cavity, the cavity being designed to receive the cantilever and contact therein with the continuous edge in mating engagement with the metal seal ring on the surface of the supporting substrate; and

- a metal seal ring [151] fixed on the continuous edge of the cap member.

wherein the metal seal ring on the continuous edge of the cap member sealingly engaged with the metal seal ring on the surface of the supporting substrate.

Regarding claims 19 and 21, Huang et al. discloses that the metal seal rings [113, 151] formed of bonding/sealing material such as gold, alloys of aluminum, copper, nickel.

Regarding claim 22, Huang et al. discloses the seal rings engaged with each other via solder of alloys.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al.

Huang et al. discloses the instant claimed invention except for the specific materials used for the alloys and the seal rings.

The specific materials used would have been an obvious design consideration based on the intended application and environment.

Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. in view of Roshen et al. [US 5,475,353].

Huang et al. discloses the instant claimed invention except for a magnet affixed to a cap member.

Roshen et al. discloses a MEMS device comprising :

- a substrate [12] ;
- a MEMS disposed on the substrate;
- a cap member [30] covering the MEMS; and
- a magnet [28] affixed to the cap member.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a magnet affixed to the cap member of Huang et al., as suggested by Roshen et al., for the purpose of biasing the MEMS.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN *TTW*

Truyen T. Nguyen